

Title (en)  
IGNITION CONTROL APPARATUS FOR INTERNAL COMBUSTION ENGINE

Title (de)  
ZÜNDSTEUERUNGSVORRICHTUNG FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)  
APPAREIL DE COMMANDE D'ALLUMAGE POUR MOTEUR À COMBUSTION INTERNE

Publication  
**EP 3199798 B1 20210310 (EN)**

Application  
**EP 17155473 A 20140411**

Priority  
• JP 2013082958 A 20130411  
• JP 2013140835 A 20130704  
• EP 14782210 A 20140411  
• JP 2014060553 W 20140411

Abstract (en)  
[origin: EP2985448A1] In an ignition control apparatus (30), a control unit (319) controls switching elements so as to supply a primary current to the other end side of a primary winding (311a) opposite to one end thereof connected to a DC power source (312) by discharging (which is performed by turning on a second switching element (314) stored energy from a capacitor (317) during ignition discharge (which is started by turning off a first switching element (313)). In particular, the control unit controls the second switching element or the third switching element so as to provide variability to the amount of stored energy discharged from the capacitor according to an operating state of an internal combustion engine.

IPC 8 full level  
**F02P 3/04** (2006.01); **F02P 3/08** (2006.01); **F02P 9/00** (2006.01); **F02P 15/10** (2006.01); **F02P 3/02** (2006.01)

CPC (source: EP US)  
**F02P 3/0407** (2013.01 - US); **F02P 3/0442** (2013.01 - EP US); **F02P 3/08** (2013.01 - EP US); **F02P 3/0876** (2013.01 - EP US);  
**F02P 9/007** (2013.01 - EP US); **F02P 15/10** (2013.01 - EP US); **F02P 3/02** (2013.01 - EP); **F02P 3/0552** (2013.01 - US);  
**F02P 3/0554** (2013.01 - US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2985448 A1 20160217**; **EP 2985448 A4 20170503**; **EP 2985448 A8 20160413**; **EP 2985448 B1 20191030**; CN 105121836 A 20151202;  
CN 105121836 B 20170829; EP 3199798 A1 20170802; EP 3199798 B1 20210310; KR 101742638 B1 20170601; KR 20150131267 A 20151124;  
US 10794354 B2 20201006; US 2016084213 A1 20160324; WO 2014168248 A1 20141016

DOCDB simple family (application)  
**EP 14782210 A 20140411**; CN 201480020862 A 20140411; EP 17155473 A 20140411; JP 2014060553 W 20140411;  
KR 20157029259 A 20140411; US 201414783575 A 20140411